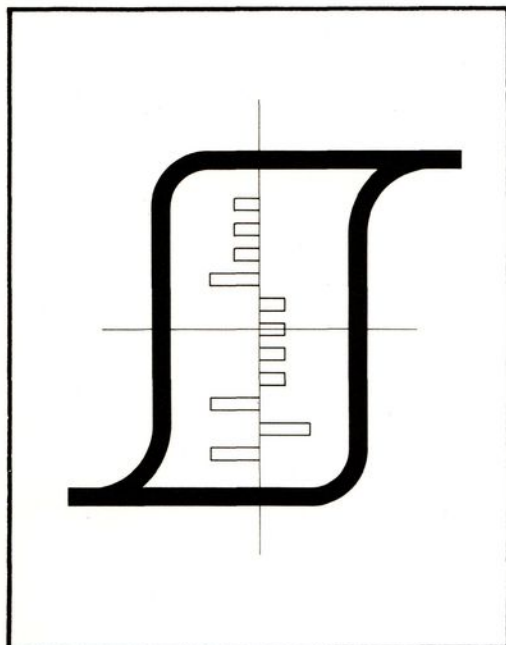




MEMORY PRODUCTS



MEMORY CORE Type FC-5003

The FC-5003 is a 50 mil ferrite memory core which exhibits fast switching speed and very low noise at moderate drive currents. It is recommended for use in memories having cycle times of 6 to 8 microseconds. At a nominal drive current of 550 milliamperes, FC-5003 has a switching time of approximately 0.80 microseconds.

MECHANICAL SPECIFICATIONS

Outside Diameter	0.050" \pm 0.002"
Inside Diameter	0.030" \pm 0.002"
Thickness	0.012" \pm 0.001"

Fracture strength: The core will not fracture when subjected to a compressive force of 200 grams applied between parallel plane surfaces normal to the core diameter.

TYPICAL OPERATING CONDITIONS (at 25°C)

Drive Currents

$I_r = I_w =$	550 milliamperes
$I_{pw} =$	275 milliamperes
$t_r =$	0.2 microseconds
$t_d =$	3.0 microseconds

Output Signals

$uV_1 =$	80 millivolts
$dV_z =$	7 millivolts
$t_p =$	0.41 microseconds
$t_s =$	0.80 microseconds

TEST SPECIFICATION (at 25°C)

Drive Current Pulse Sequence

All cores are tested using the pulse sequence shown in Figure 1. Cores are delivered 100% tested to a 0.015 AQL as defined by Mil STD-105D, Inspection Level II.

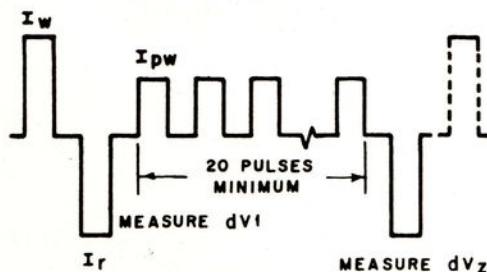


Figure 1.

Test Drive Conditions

$I_r = I_w =$	500 milliamperes \pm 1%
$I_{pw} =$	300 milliamperes \pm 1%
$t_r =$	0.2 microseconds
$t_d =$	3.0 microseconds

Test Output Signals

$uV_1 =$	60 millivolts minimum. The maximum variation in uV_1 within a given lot will be no greater than \pm 12%
$dV_z =$	8 millivolts maximum
$t_p =$	$0.47 \pm .05$ microseconds
$t_s =$	1.05 microseconds maximum



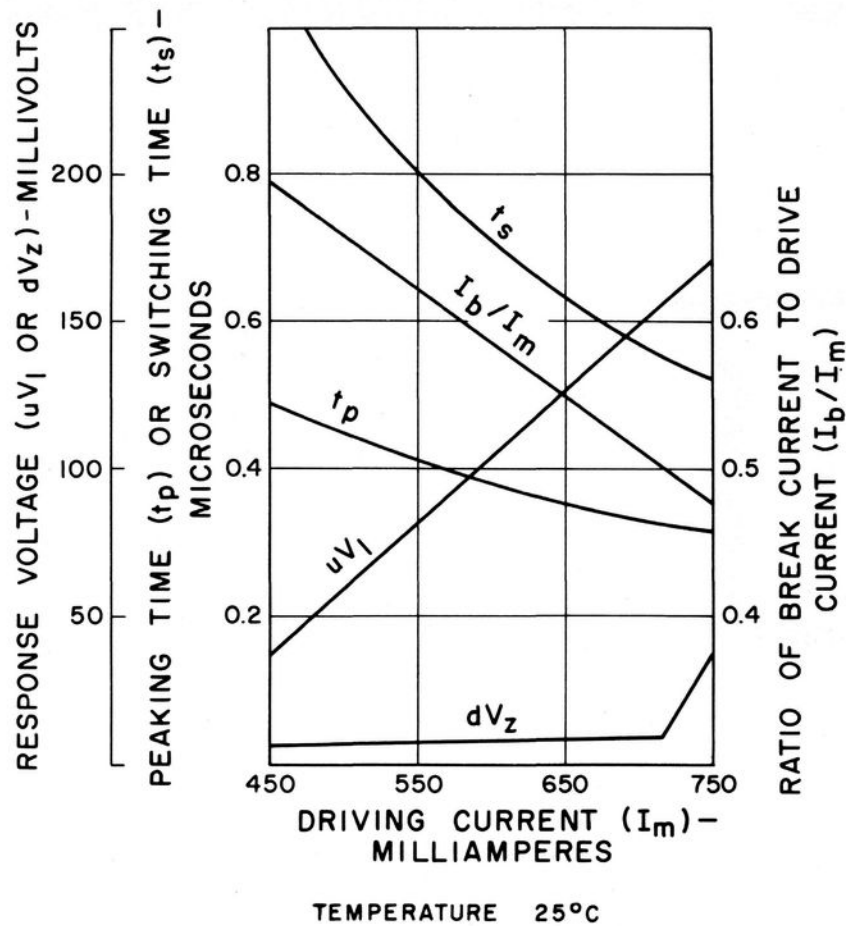


Figure 2. TYPICAL OPERATING CHARACTERISTICS

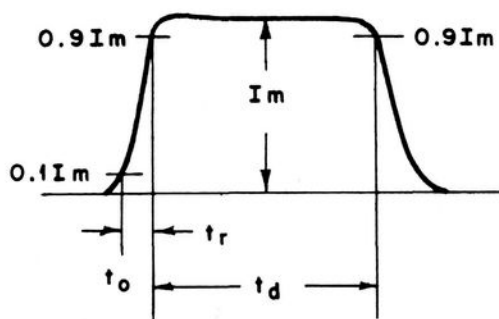


Figure 3. CURRENT PULSE

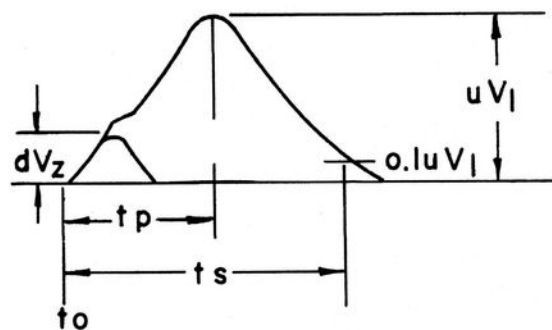


Figure 4. VOLTAGE RESPONSE



Burroughs Corporation

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